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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/075,032	02/12/2002	Roger R. Brinkley	7784-000338	6309	
7590 06/16/2006			EXAMINER		
Mark D. Elchuk and Alan L. Cassel			AMINZAY, SHAIMA Q		
Harness, Dickey & Pierce, P.L.C. Suite 400			ART UNIT	PAPER NUMBER	
5445 Corporate Drive Troy, MI 48098-2683			2618 DATE MAILED: 06/16/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
Office Action Summary		10/075,032	BRINKLEY ET AL.				
		Examiner	Art Unit				
		Shaima Q. Aminzay	2618				
Period fo	The MAILING DATE of this communication app r Reply	ears on the cover sheet with	the correspondence addi	ress			
WHIC - Exter after - If NO - Failu Any r	CRTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DAISIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute, eply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICA 6(a). In no event, however, may a repl ill apply and will expire SIX (6) MONTH cause the application to become ABAN	ATION. y be timely filed IS from the mailing date of this com IDONED (35 U.S.C. § 133).				
Status							
1)[\	Responsive to communication(s) filed on 13 M	arch 2006					
,	This action is FINAL . 2b) ☐ This action is non-final.						
, —	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
٥,١	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	on of Claims						
4)⊠ Claim(s) <u>1-12,14-21 and 24</u> is/are pending in the application.							
	4a) Of the above claim(s) is/are withdrawn from consideration.						
5)	5) Claim(s) is/are allowed.						
,)⊠ Claim(s) <u>1-12,14-21 and 24</u> is/are rejected.						
-							
	Claim(s) are subject to restriction and/or election requirement.						
Applicati	on Papers						
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>21 January 2005</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority ι	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage 							
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.							
•							
Attachmen		4) T Interview Su	mmary (PTO-413)				
	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/	Mail Date				
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	5) Notice of Info 6) Other:	ormal Patent Application (PTO- 	152)			

DETAILED ACTION

Response to Argument

Applicant's arguments filed March 13, 2006 have been fully considered.

- Applicant's arguments with respect to Specification, Title Objection are not persuasive. There is no mention of "ARINC 615 download" in any of the claims, therefor, the objection with respect to the invention title remains.
- 2. Response to applicant's arguments with respect to the claims 1-12, and 14-20 rejection under 35 U.S.C. 112 First Paragraph is moot, amendment to the independent claims 1, 11, 20, 21, 24, and dependent claims 2, 3, and 12 meets the requirements, therefor, the rejection under 35 U.S.C. 112 First Paragraph is withdrawn.
- 3. Applicant's arguments with respect to rejected claims 1-12, 14-21, and 24 under Claim Rejection 35 U.S.C. 102(f) is convincing, therefor, the rejection with respect to claims 1-12, 14-21, and 24 are withdrawn.
- 4. Arguments with respect to claims 1-12, 14-21, and 24 are moot as the amendment overcomes the Claim Rejections 35 USC 103(a), therefore, the Claim Rejections 35 USC 103(a) with respect to claims 1-12, 14-21, and 24 are

withdrawn.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the amended claims and the added new claims are directed.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a

terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 1-12, 14-21, and 24 (Brinkley. et al., hereinafter Brinkley) are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-18 of U. S. Patent No. 6,671,589 (Holst et al., hereinafter Holst)). Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claims 1 and 11, Holst discloses method of remotely data loading to LRU "An apparatus for manually and remotely activating ARINC 615 communication with connected aircraft computers comprising of: A software programmable electronic switch used to select a target aircraft LRU for ARINC 615-3 data uploads and downloads, said switch having: a) A processor controlled switch interface directly connected to all loadable ARINC 615-3 LRUs, b) TCP/IP network connectivity to a Network Server System file server or spread spectrum wireless transceiver, c) Programmable I/O so that various configurations of aircraft data loader connections can be mapped at the unit and available for display or transmission to any authorized network client, d) ARINC 429 transceivers used for data bus monitoring and transmission, e) A display and programmable selection buttons to initiate actions determined by software resident on said electronic switch, including using the front panel buttons for manual control of the connections to the said switch, manual acquisition and

routing of data contained in aircraft LRUs connected to said switch and enabling of a video feed from network devices, including network cameras operatively connected to the apparatus for viewing on the apparatus display, f) A configuration data collection tool, used for polling the aircraft LRUs for software part numbers, storage, and transmission of reports containing software part number related information to requesting network clients" (claim 11, column 6, lines 36-67), "A method to route and remotely upload software updates to ARINC 615 compliant LRUs on an aircraft which comprises: Connecting all avionics computers that accept ARINC 615 operational program software, operational program configuration files and performance databases to an electronic apparatus which provides a means to complete an electrical connection between said apparatus and any loadable target on-aircraft computer for the purpose of uploading software files remotely or by means of commands stored in said apparatus; Initiating a software upload, software upload request or configuration request to the electrical apparatus from an on-board or ground-based network client, said apparatus in the form of a server/router/switch with display capability, installed in the flight deck compartment of an aircraft; Converting received ARINC 615 communication from a loadable target computer as a result of a software upload, to any number of standard network-based protocols for storage of pertinent feedback information and further transmission to requesting network clients, this information comprising of: Updated software part number or part numbers generated and transmitted by the target LRU or LRUs to the apparatus

upon successful completion of a software upload and collected and stored in the electrical apparatus, whereby the software upload, software upload request or configuration request is initiated by network devices including: a) remote client devices operatively connected to the aircraft LAN using wired Ethernet, fiber-optic connectivity or a cabin or aircraft wireless spread spectrum connection configured as an wireless access point, b) remote client devices operatively connected to the airport WAN, typically located in an appropriate ground-based network operations center, which provides data content for subscribing aircraft" (claim1, column 4, lines 65-67 continued to column 5, lines 1-36).

Regarding claims 20 and 21, Holst discloses method and apparatus for remotely data loading LRU and processor software controlled switch, "An apparatus for manually and remotely activating ARINC 615 communication with connected aircraft computers comprising of: A software programmable electronic switch used to select a target aircraft LRU for ARINC 615-3 data uploads and downloads, said switch having: a) A processor controlled switch interface directly connected to all loadable ARINC 615-3 LRUs, b) TCP/IP network connectivity to a Network Server System file server or spread spectrum wireless transceiver, c) Programmable I/O so that various configurations of aircraft data loader connections can be mapped at the unit and available for display or transmission to any authorized network client, d) ARINC 429 transceivers used for data bus monitoring and transmission, e) A display and programmable selection buttons to

initiate actions determined by software resident on said electronic switch, including using the front panel buttons for manual control of the connections to the said switch, manual acquisition and routing of data contained in aircraft LRUs connected to said switch and enabling of a video feed from network devices, including network cameras operatively connected to the apparatus for viewing on the apparatus display, f) A configuration data collection tool, used for polling the aircraft LRUs for software part numbers, storage, and transmission of reports containing software part number related information to requesting network clients" (claim 11, column 6, lines 36-67), "A method to route and remotely upload software updates to ARINC 615 compliant LRUs on an aircraft which comprises: Connecting all avionics computers that accept ARINC 615 operational program software, operational program configuration files and performance databases to an electronic apparatus which provides a means to complete an electrical connection between said apparatus and any loadable target on-aircraft computer for the purpose of uploading software files remotely or by means of commands stored in said apparatus; Initiating a software upload, software upload request or configuration request to the electrical apparatus from an on-board or ground-based network client, said apparatus in the form of a server/router/switch with display capability, installed in the flight deck compartment of an aircraft; Converting received ARINC 615 communication from a loadable target computer as a result of a software upload, to any number of standard network-based protocols for storage of pertinent feedback information

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and further transmission to requesting network clients, this information comprising of: Updated software part number or part numbers generated and transmitted by the target LRU or LRUs to the apparatus upon successful completion of a software upload and collected and stored in the electrical apparatus, whereby the software upload, software upload request or configuration request is initiated by network devices including: a) remote client devices operatively connected to the aircraft LAN using wired Ethernet, fiber-optic connectivity or a cabin or aircraft wireless spread spectrum connection configured as an wireless access point, b) remote client devices operatively connected to the airport WAN, typically located in an appropriate ground-based network operations center, which provides data content for subscribing aircraft" (claim1, column 4, lines 65-67 continued to column 5, lines 1-36).

The cited reference has more limitations, thereby encompassing the present application's limitations.

<u>Furthermore, omission of an element and its function in combination is</u>

<u>obvious expedient if remaining elements perform same functions as before in re</u>

KARLSON (CCPA) 136 USPQ 184 (1963).

For these reasons, independent claims 1, 11, 20, 21, and 24 are rejected.

Claims 2-10 are dependent of claim 1, and claims 12, 14-19 are dependent of claim 11 are rejected on the ground of nonstatutory obviousness-type double

patenting under the same reasons set forth in claims 1 and 11.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12, 14-21, and 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 1, lines 2-5, 7; in claim 2, lines 1-2; in claim 11, lines 2-5, 7; in claim 12, lines 2, 4; in claim 20, line 2-3; in claim 21, lines 2-5, 9-10, in claim 24, lines 1, the phrase "aeronautical vehicle" is not supported in the specification. The specification does not specify or even mentions any "aeronautical vehicle". Claims 2-10, and 14-19, which depend from independent claims 1 and 11 are rejected under the same reasons set forth in claims 1 and 11.

Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that is not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In claim 24, line 1, the phrase "aeronautical vehicle", and in line 3, the phrase "mobile platform" is not supported in the specification. The specification does not specify or even mentions any "mobile platform", and "aeronautical vehicle".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action.

- (a) Patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claims 1-12, 14-21, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray (Murray et al. U. S. Patent 6,385,513) in view of Wright (Wright et al. U. S. Publication 2003/0148,736).

Regarding claim 1, Murray discloses a method for remotely downloading

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data to a selected one of a plurality of electronic line replaceable units (LRUs) on an aeronautical vehicle (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56, downloading data to one for the of electronic line replacement units (LRU)), said method comprising: transmitting a message wirelessly to a receiver on the aeronautical vehicle identifying an LRU to which data is to be downloaded (see for example, Figures 4-6, column 7, lines 22-63, column 8, lines 15-67, the transmitted message received on the aircraft and to data load LRU); remotely operating a software-controlled switch to electronically configure a communication path between the identified LRU and an aeronautical vehicle data services link in response to said message_identifying the LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link); and [wirelessly] downloading data from the receiver to the identified LRU utilizing the remotely electronically configured communication path (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, identify LRU and downloading data).

Murray does not specifically teach wireless downloading, however, Murray teaches the aircraft and remotely electronically configuration with downloading function (see for example, column 7, lines 22-63, column 1, lines 1-6, column 4, lines 33-67, column 8, lines 50-56).

In related art dealing with a wireless communications and aircrafts units (see for example, Figure 1-8, paragraph [0001], lines 1-12), Wright teaches wireless downloading (see for example, paragraphs [0007], [0008], [0009], [0010], and [0084], lines 11-22).

It would have been obvious to one of ordinary skill in the art at the time invention was made to include Wright's wireless downloading into Murray's avionics downloading system to provide a system that can download data to various aircraft units "without having to physically access", "unit on board the aircraft is successfully addressed by means of a wireless ground data link" (Wright, paragraph [0007], lines 3-5).

Regarding claim 11, Murray discloses an apparatus for remotely downloading data to a selected one of a plurality of electronic line replaceable units (LRUs) on an aeronautical vehicle (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56, wireless system and data downloading to one for the plurality of LRUs), said apparatus configured to: receive a message wirelessly transmitted to the aeronautical vehicle identifying an LRU to which data is to be downloaded (see for example, Figures 4-6, column 7, lines 22-63, column 8, lines 15-67, the transmitted message received on the aircraft and to data load LRU); remotely operate an electronic switch to electronically configure a communication path between the identified LRU and a aeronautical vehicle data services link in

response to the wirelessly transmitted message identifying the LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link); and wirelessly download data to the identified LRU utilizing the remotely electronically configured communication path (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, identify LRU and downloading data).

Murray does not specifically teach wireless downloading, however, Murray teaches the aircraft and remotely electronically configuration with downloading function (see for example, column 7, lines 22-63, column 1, lines 1-6, column 4, lines 33-67, column 8, lines 50-56).

In related art dealing with a wireless communications and aircrafts units (see for example, Figure 1-8, paragraph [0001], lines 1-12), Wright teaches wireless downloading (see for example, paragraphs [0007], [0008], [0009], [0010], and [0084], lines 11-22).

It would have been obvious to one of ordinary skill in the art at the time invention was made to include Wright's wireless downloading into Murray's avionics downloading system to provide a system that can download data to various aircraft units "without having to physically access", "unit on board the aircraft is successfully addressed by means of a wireless ground data link" (Wright, paragraph [0007], lines 3-5).

Regarding claim 20. Murray discloses an apparatus for downloading data to a selected one of a plurality of electronic line replaceable units (LRUs) onboard an aeronautical vehicle (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56, wireless system and data downloading to one for the plurality of LRUs), said apparatus comprising: a wireless radio transceiver configured to receive a message identifying at least one of said LRUs to which data is to be downloaded (see for example, Figures 4-6, column 7, lines 22-63, column 8, lines 15-67, the transmitted message received on the aircraft and to data load LRU);a communication management unit server responsive to said message received at said wireless radio transceiver identifying the selected LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link); and a remotely controllable software-controlled electronic switch responsive to said communication management unit server to electronically configure a data path between said wireless radio transceiver and the selected LRU for downloading of data from the wireless radio transceiver to the selected LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link).

Murray does not specifically teach wireless downloading, however, Murray teaches the aircraft and remotely electronically configuration with downloading function (see for example, column 7, lines 22-63, column 1, lines 1-6, column 4, lines 33-67, column 8, lines 50-56).

In related art dealing with a wireless communications and aircrafts units (see for example, Figure 1-8, paragraph [0001], lines 1-12), Wright teaches wireless downloading (see for example, paragraphs [0007], [0008], [0009], [0010], and [0084], lines 11-22).

It would have been obvious to one of ordinary skill in the art at the time invention was made to include Wright's wireless downloading into Murray's avionics downloading system to provide a system that can download data to various aircraft units "without having to physically access", "unit on board the aircraft is successfully addressed by means of a wireless ground data link" (Wright, paragraph [0007], lines 3-5).

Regarding claim 21, Murray discloses a method for remotely downloading information to a selected one of a plurality of electronic units located on an aeronautical vehicle (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56, wireless system and data downloading to one for the plurality of units), comprising: transmitting a message wirelessly to said aeronautical vehicle from a location remote from said aeronautical vehicle (see for example, Figures 4-6, column 7,

lines 22-63, column 8, lines 15-67, the transmitted message received on the aircraft), to select which one of said electronic units is to receive subsequently transmitted information (see for example, Figures 4-6, column 7, lines 22-63, column 8, lines 15-67, the transmitted information received by the aircraft units); remotely operating a software-controlled switch to remotely configure a communications link with the selected electronic unit, and [wirelessly] downloading information transmitted to the aeronautical vehicle (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and electronic units), to the selected electronic component, utilizing the remotely configured communications link (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, identify LRU and downloading data).

Murray does not specifically teach wireless downloading, however, Murray teaches the aircraft and remotely electronically configuration with downloading function (see for example, column 7, lines 22-63, column 1, lines 1-6, column 4, lines 33-67, column 8, lines 50-56).

In related art dealing with a wireless communications and aircrafts units (see for example, Figure 1-8, paragraph [0001], lines 1-12), Wright teaches wireless downloading (see for example, paragraphs [0007], [0008], [0009], [0010], and [0084], lines 11-22).

It would have been obvious to one of ordinary skill in the art at the time invention was made to include Wright's wireless downloading into Murray's avionics downloading system to provide a system that can download data to various aircraft units "without having to physically access", "unit on board the aircraft is successfully addressed by means of a wireless ground data link" (Wright, paragraph [0007], lines 3-5).

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Regarding claim 24, Murray discloses an aeronautical vehicle comprising: an apparatus for downloading information to a selected one of a plurality of electronic units located onboard the mobile [platform] (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56, wireless system (mobile) and data downloading to one for the plurality of units), the apparatus including: a wireless device configured to receive a message identifying at least one of said electronic devices as a selected electronic device to which information is to be subsequently downloaded to (see for example, Figures 4-6, column 7, lines 22-63, column 8, lines 15-67, the transmitted message received on the aircraft and to data units to be downloaded); a subsystem responsive to said wireless device; a remotely controlled software switch responsive to said subsystem for configuring a data path between said wireless device and said selected electronic device to enable downloading of said information subsequently received by said wireless device (see for example, column 3, lines 42-45,

column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link), to said selected electronic device, via said data path (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, identify LRU and downloading data).

Murray does not specifically teach wireless platform, however, Murray teach the aircraft and remotely electronically configuration (see for example, column 7, lines 22-63).

In related art dealing with a wireless communications and aircrafts (see for example, Figure 1-8, paragraph [0001], lines 1-12), Wright teaches the mobile platform (see for example, paragraph [0084], lines 11-22).

It would have been obvious to one of ordinary skill in the art at the time invention was made to include Wright's mobile platform concept into Murray's avionics downloading system to provide a system that can download data to various aircraft units "without having to physically access", "unit on board the aircraft is successfully addressed by means of a wireless ground data link" (Wright, paragraph [0007], lines 3-5).

Regarding claim 2, Murray in view of Wright discloses all the limitations of claim 1, and further, Murray teaches wherein the aeronautical vehicle is an aircraft and the remotely electronically configured communication path is an

ARINC 429 communication path (see for example, Figures 4-6, column 1, lines 1-6, column 4, lines 33-67, column 7, lines 22-63, column 8, lines 50-56)

Regarding claim 3, Murray in view of Wright discloses all the limitations of claim 2, and further, Murray teaches wherein said remotely operating the software-controlled switch to electrically configure a communication path comprises remotely electrically selecting one of a plurality of ARINC 429 communication paths utilizing the software-controlled switch (see for example, column 3, lines 42-45, column 3, lines 30-50, column 7, lines 22-63, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and ARINC 429).

Regarding claim 4, Murray in view of Wright discloses all the limitations of claim 1, and further, Wright teaches wherein said transmitting a message wirelessly comprises transmitting the message wirelessly utilizing a wireless spread spectrum communication link (see for example, paragraph [0009], lines 1-6).

Regarding claim 5, Murray in view of Wright discloses all the limitations of claim 1, and further, Murray teaches wherein said transmitting a message wirelessly further comprises transmitting an operational program configuration (OPC) file that contains criteria for automated routing (see for example, column

5, lines 40-64, column 6, lines 37-57, the operational controller (OPC)).

Regarding claims 6 and 16, Murray in view of Wright discloses all the limitations of claims 1, 11, and further, Murray teaches comprising triggering said wirelessly downloading data upon a triggering condition (see for example, column 11, lines 14-32, column 13, lines 62-65).

Regarding claims 7 and 17, Murray in view of Wright discloses all the limitations of claims 6, 16, and further, Murray teaches configured to trigger said wireless download of data upon setting a of parking brake (see for example, column 7, lines 22-63 and column 8, lines 50-61, column 11, lines 14-32, column 13, lines 62-65, data loading when on ground (park)).

Regarding claims 8 and 18, Murray in view of Wright discloses all the limitations of claims 1, 16, and further, Murray teaches accumulating records of wireless downloads (see for example, column 7, lines 22-63 and column 8, lines 40-61).

Regarding claim 9, Murray in view of Wright discloses all the limitations of claims 1, and further, Murray teaches configuring a header file for the identified LRU to download (see for example, column 7, lines 22-63 and column 8, lines 40-61).

Regarding claim 10 and 19, Murray in view of Wright discloses all the limitations of claims 1, 11, and further, Murray wherein said data wirelessly downloaded comprises operational software (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65).

Regarding claim 12, Murray in view of Wright discloses all the limitations of claim 11, and further, Murray teaches the aeronautical vehicle is an aircraft and to remotely operate a software-controlled switch to electronically configure a communication path between the identified LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and LRU service link) and the aeronautical vehicle data services link in response to the wirelessly transmitted message identifying the LRU (see for example, column 3, lines 42-45, column 3, lines 30-50, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, identify LRU and downloading data), said apparatus is further configured to remotely electronically select one of a plurality of ARINC 429 communication paths (see for example, column 3, lines 42-45, column 3, lines 30-50, column 7, lines 22-63, column 9, lines 63-67 continued to column 10, lines 1-20, column 13, lines 62-65, the software controlled selection and ARINC 429).

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Regarding claim 14, Murray in view of Wright discloses all the limitations of claim 11, and further, Wright teaches wherein said apparatus further comprises a wireless spread spectrum transceiver configured to receive said message wirelessly (see for example, paragraph [0009], lines 1-6).

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Regarding claim 15, Murray in view of Wright discloses all the limitations of claim 11, and further, Murray teaches receive an operational program configuration (OPC) file that contains criteria for automated routing (see for example, column 5, lines 40-64, column 6, lines 37-57, the operational controller (OPC)).

Conclusion

Applicant's amendment necessitated the **new ground(s)** of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaima Q. Aminzay whose telephone number is 571-272-7874. The examiner can normally be reached on 7:00 AM -5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shaima Q. Aminzay

(Examiner)

June 8, 2006

NAY MAUNG SUPERVISORY PATENT EXAMINER

Nay A. Maung

(SPE)